Application No. 10/768,038 Responsive to Office Action dated December 28, 2005

; TAIYO, NAKAJIMAANDKATO

Attorney Docket No. FS-F03226-01

:0333556430

Amendment to the claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of claims:

1. (currently amended) An image forming method using an image recording apparatus comprising:

providing an image recording apparatus comprising a laser irradiating means for laser scanning of a photothermographic material that has a support and includes on at least one surface thereof a photosensitive silver halide, a non-photosensitive organic silver salt, a reducing agent-and a binder; and a conveying means for guiding the laser scanned photothermographic material in a sub-scanning direction to a thermal development unit,

providing a photothermographic material that has a support and includes on at least one surface thereof a photosensitive silver halide, a non-photosensitive organic silver salt, a reducing agent and a binder; and

forming an image by using the image recording apparatus to laser scan the photothermographic material, convey the photothermographic material to the thermal development unit and thermally develop the photothermographic material,

wherein a distance between a scanning-line of the laser irradiating means and an inserting-portion of the thermal development-unit distance between scanning exposure position of the photothermographic material and an inserting portion of the thermal development unit is equal to or shorter than 40 cm, and the reducing agent is at least one selected from the group of compounds represented by the following formula (R1):

Formula (R1)

$$\begin{array}{c|c} OH & R^3 \\ \hline \\ R^1 & OH \\ \hline \\ R^2 & R^{2'} \end{array}$$

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wherein, in formula (R1), R¹ and R¹ each independently represents an alkyl group having 1 to 20 carbon atoms; R² and R² each independently represents a hydrogen atom or a substituent for a benzene ring; R³ represents a substituent for forming a 3- to 7-membered ring composed of atoms selected from a carbon atom, an oxygen atom, a nitrogen atom, a sulfur atom and a phosphor atom; and X and X' each independently represents a hydrogen atom or a substituent for a benzene ring; and compounds represented by the following formula (R2):

Formula (R2)

wherein, in formula (R2), R¹ and R¹ each independently represents an alkyl group having 1 to 20 carbon atoms; R² and R² each independently represents a hydrogen atom or a substituent for a benzene ring; R³ represents an alkenyl group or an alkyl group having a substituent having an unsaturated bond; and X and X' each independently represents a hydrogen atom or a substituent for a benzene ring.

2. (cancelled)

3. (original) The image forming method according to claim 1, wherein the photothermographic material has a silver coating amount of 1.9 g or less per m² of the photothermographic material.

4. (cancelled)

5. (currently amended) The image forming method according to claim 1, wherein the thermal development is carried out with a thermal developing time ranging from 6 to 14 seconds.

6. (cancelled)

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- 7. (currently amended) The image forming method according to claim 3, wherein the thermal development is carried out with a thermal developing time ranging from 6 to 14 seconds.
- The image forming method according to claim 1, wherein the 8. (currently amended) thermal development is carried out at a temperature ranging from 80 to 250°C.
- The image forming method according to claim 1, wherein the 9. (currently amended) thermal development is carried out at a temperature ranging from 110 to 130°C.
- 10. (currently amended) The image forming method according to claim 1, wherein the thermal development is carried out using a plate heater.
- 11 to 20 (cancelled)

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